

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Attorney Docket No. 14541US02 (BU 3027)

IN THE APPLICATION OF:)
Haixiang Liang, et al.) **Electronically Filed on July 15, 2010**
SERIAL NO.: 10/767,604)
FILED: January 28, 2004)
FOR: OPERATIONAL ANALYSIS SYSTEM)
FOR A COMMUNICATION DEVICE)
EXAMINER: CHEN, QING)
GROUP ART UNIT: 2191)
CONFIRMATION NO.: 5206)
CUSTOMER NO.: 23446)

PRE APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reasons stated on the attached sheets.

Respectfully submitted,

Date: July 15, 2010

By: /Philip Henry Sheridan/
Philip Henry Sheridan
Reg. No. 59,918
Attorney for Applicant

REMARKS

The present application includes pending claims 9-13 and 19-46, all of which have been rejected. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 9-13 and 39-41 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Abdelilah et al. (U.S. Patent No. 6,823,004, hereinafter “Abdelilah”). Claims 19-38, 42-44 and 46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Abdelilah in view of Kaler et al. (U.S. Patent No. 6,467,052, hereinafter “Kaler”). Claim 45 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Abdelilah in view of Kaler and further in view of Read et al. (U.S. Patent No. 5,353,243, hereinafter “Read”). Without acknowledging that Abdelilah qualifies as prior art under 35 U.S.C. § 102(e), the Applicant respectfully traverses the rejection for at least the following reasons.

Regarding claim 9, the Applicant respectfully submits that Abdelilah fails to at least teach, suggest, or disclose, for example, “a recording module processor communicatively coupled to the first input and the second input that **operates to fully record input information arriving at one or both of the first input and the second input** during real-time operation of the modem device for subsequent non-real-time analysis,” as set forth in Applicant’s independent claim 9.

Regarding claim 19, Applicant respectfully submits that the combination of Abdelilah and Kaler at least fails to teach, suggest, or disclose at least, for example, “wherein the recording module **fully records the input information received at the modem** during real-time operation of the modem,” as set forth in Applicant’s independent claim 19.

Regarding claim 27, Applicant respectfully submits that the combination of Abdelilah and Kaler at least fails to teach, suggest, or disclose at least, for example, “while operating the modem in real-time, utilizing the recording module to **fully record input information input to at least the first and/or second inputs of the modem**,” as set forth in Applicant’s independent claim 27.

Abdelilah merely teaches using the DSP 340 to process and store in DSP memory 345: diagnostic data, data related to modem performance and internal state information (i.e., select

data).¹ Nowhere in Abdelilah is there any disclosure regarding **fully recording input information arriving at one or both of the first input and the second input**. Rather, Abdelilah identifies the select data that may be obtained, for example, at Column 9, Lines 33-61. More specifically, Abdelilah explicitly and repeatedly discloses that it merely captures “a selected type of data related to the performance of the modem responsive to a state transition.”² Thus, because Abdelilah merely discloses processing and storing **select data** related to diagnostics, performance and internal states, Abdelilah fails to disclose “a recording module processor communicatively coupled to the first input and the second input that **operates to fully record input information arriving at one or both of the first input and the second input** during real-time operation of the modem device for subsequent non-real-time analysis,” as recited by the Applicant in independent claim 9; “wherein the recording module **fully records the input information received at the modem** during real-time operation of the modem,” as set forth in Applicant’s independent claim 19; and, “while operating the modem in real-time, utilizing the recording module to **fully record input information input to at least the first and/or second inputs of the modem**,” as set forth in Applicant’s independent claim 27.

The Advisory Action and the Response to Arguments section of the Final Office Action states the following:

Abdelilah clearly discloses “a recording module processor communicatively coupled to the first input and the second input that operates to cause all input information arriving over a period of time at one or both of the first input and the second input during real-time operation of the modem device to be recorded for subsequent non-real-time analysis”

(see Column 9: 66 and 67 to Column 10: 1-49, “...the teachings of the present invention are particularly directed to environments in which both a primary path and a secondary path are available to the DSP memory 345 to provide for monitoring operations to occur

¹ See e.g., Abdelilah, Abstract; Column 4, Lines 62-64; Column 5, Lines 14 and 24-30; Column 8, Lines 16-19, 30-31 and 63-66; Column 9, Lines 1-4, 10-11 and 33-43; and Column 10, Lines 6-7.

² See e.g., Abdelilah, Column 5, Lines 28-30; Column 10, Lines 15-19; Column 12, Line 60; Column 13, Lines 26 and 41-42; Column 14, Lines 16-18; Column 15, Lines 35-37; Column 11, Lines 51-53; Column 17, Lines 46-48.

in real time while a communication connection is active through the modem. As is evident from **the types of information identified above which may be monitored** according to the present invention, **a significant amount of performance information can be tracked** during a communication connection, for example, on a minute-by-minute basis or responsive to detection of the occurrence of certain events. The monitoring system of the present invention may be utilized to monitor internal states of the modem 310 or state transitions of one or more state machines implemented within the modem 310 and to **selectively record specified parameters** out of the total set of parameters available within the DSP memory 345 during state conditions where the **selected parameters are significant or of potential interest to a diagnostic user.**" and

"Information may be collected on a real time basis and recorded during the life of a connection. Furthermore, information about disconnects may be gathered and throughput for a connection can be estimated. In addition, data may also be collected when a connection is being attempted, in other words, during the startup phases before a connection is in use for data communication." and

"Furthermore, as performance information may be collected on a real-time basis during a connection, **pertinent data may be preserved** which might otherwise be lost as a result of an event causing diagnostic data in the DSP memory 345 to be overwritten (for example, during retrains). The performance data may be recorded while the user of the client modem 310 is actively connected to a remote server modem in a normal manner such as through a service provider end user application (e.g. AOL, IGN Dialer and Windows Dial-up Networking) executing on the host system 300. Performance data may be obtained throughout the active connection operations including both the startup phases and during data communication as well as the disconnect procedures.

Note that Abdelilah's invention is directed to monitoring the performance of a modem which may be able to obtain data in real-time. Abdelilah discloses that real-time modem performance data, internal states of the modem, modem communication data, and modem startup and disconnect data, etc. are recorded during the life of a connection of the modem. **Thus, one of ordinary skill in the art would readily comprehend that pertinent data and information related to the performance of the modem must be fully recorded in order to provide a complete analysis of the performance of the modem at a later time.**³

Clearly, as the cited sections of Abdelilah explicitly teach, Abdelilah does not **fully record input information arriving at one or both of a first input and a second input** during real-time operation of the modem device. Rather, Abdelilah merely teaches **selectively recording specified**

³ Advisory Action, Page 2, Lines 8-31 *and* Final Office Action, Page 32, Line 18 – Page 34, Line 9

parameters (i.e., certain types of information, pertinent data). Further, even the Examiner explicitly acknowledges recording only pertinent information and information related to the performance of the modem, which is different than fully recording input information arriving at one or both of a first input and a second input during real-time operation of the modem device. More specifically, “pertinent data” and “information related to the performance of the modem” are different than “input information arriving at one or both of a first input and a second input during real-time operation of the modem device.” Additionally, in the previous non-final Office Action, the Examiner explicitly acknowledges that Abdelilah only records relevant modem data.⁴

The Advisory Action further states that “[f]or further clarification, the Examiner also submits that in order for Abdelilah’s invention to monitor the performance of the modem, **all data related to the performance of the modem must be recorded.**”⁵ However, recording all data related to the performance of the modem is different than recording all input information arriving at one or both of a first input and a second input during real-time operation of the modem device. More specifically, nowhere in Abdelilah is there any disclosure that its performance data includes all input information arriving at one or both of a first input and a second input during real-time operation of the modem device. Rather, Abdelilah explicitly and repeatedly defines performance data to be a selected type of data,⁶ much of which is not even received at its inputs 310 and 315.⁷

Kaler fails to remedy the deficiencies of Abdelilah. Thus, Abdelilah (and the combination of Abdelilah and Kaler) clearly fails to teach “a recording module processor communicatively coupled to the first input and the second input that **operates to fully record input information arriving at one or both of the first input and the second input during real-time operation of the modem device** for subsequent non-real-time analysis,” as set forth in Applicant’s independent

(emphasis added).

⁴ October 27, 2009 Non-Final Office Action, Page 37, Line 22 - Page 38, Line 3.

⁵ Advisory Action, Page 2, Lines 32-33 (emphasis added).

⁶ See e.g., Abdelilah, Column 5, Lines 28-30; Column 10, Lines 15-19; Column 12, Line 60; Column 13, Lines 26 and 41-42; Column 14, Lines 16-18; Column 15, Lines 35-37; Column 11, Lines 51-53; Column 17, Lines 46-48.

⁷ See e.g., Abdelilah, Column 9, Lines 33-61.

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claim 9; “wherein the recording module **fully records** the input information received at the **modem** during real-time operation of the modem,” as set forth in Applicant’s independent claim 19; and, “while operating the modem in real-time, utilizing the recording module to **fully record** input information input to at least the first and/or second inputs of the modem,” as set forth in Applicant’s independent claim 27.

As such, the Advisory Action’s allegation that Abdelilah’s disclosure of recording select performance data teaches fully recording input information received at one or both of a first input and a second input during real-time operation of a modem device amounts to **clear error**.

The Applicant notes that Read fail to remedy the deficiencies of Abdelilah and Kaler. The Applicant further notes that dependent claims 10-13, 20-26 and 28-46 depend from independent claims 9, 19 or 27, and are therefore allowable for at least the reasons set forth above with regard to independent claims 9, 19 and 27. The Applicant further notes that each of dependent claims 10-13, 20-26 and 28-46 is independently allowable.

Thus, Applicant respectfully submits that claims 9-13 and 19-46 of the present application should be in condition for allowance at least for the reasons discussed above and request that the outstanding rejections be reconsidered and withdrawn. The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

Date: July 15, 2010

MCANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, Illinois 60661
(T) 312 775 8000
(F) 312 775 8100

/Philip Henry Sheridan/
Philip Henry Sheridan
Registration No. 59,918
Attorney for Applicant